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| 10/047,270      | 01/14/2002  | Catharina R. Biber   | 4589P008            | 4506             |

7590 06/07/2004  
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| EXAMINER |
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CARIASO, ALAN B

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| ART UNIT | PAPER NUMBER |
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2875

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/047,270             | BIBER ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Alan Cariaso           | 2875                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-10,12-16,24,25,33-36,38-52 and 54-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,9,24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,10,12-16,33-36,38-52,54-59 and 62 is/are rejected.
- 7) ☒ Claim(s) 60,61,63 and 64 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's response/amendment filed March 11, 2004 is acknowledged. Claims 1, 2, 5, 7, 33, 50 and 51 are amended. New claims 59-64 are added. Claims 4, 11, 17-23, 26-32, 37 and 53 are canceled. Claims 1-3, 5-10, 12-16, 24, 25, 33-36, 38-52 and 54-64 are pending.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 43-52, 54-58, 63 and 64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 43, the limitations "a lamp housing ... having a reflector" and "a heat dissipating housing coupled to the reflector" are indefinite as being the same part or different parts from each other. The specification supports description of a lamp housing (20,52, or 82) that has or is integral to the reflector and primarily dissipates the heat from the reflector. No support is given to a heat dissipating housing different from the lamp housing which receives and dissipates heat.

5. Claims 44-49 are indefinite because they recite "the heat dissipating housing" which is unclear as being the same as the "lamp housing".

6. Similarly, in claims 50 and 51, they recite "a lamp housing ... having a reflector" and "a housing coupled to the reflector" which are indefinite as being claimed two parts,

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but are disclosed to be the same one housing which receives and dissipates heat from the reflector.

7. Claims 52, 55-58, 63 and 64 are indefinite for reciting "the housing" which is unclear as being the same as the "heat dissipating housing" or "lamp housing".

8. Claim 54 is indefinite for depending on indefinite claim 43.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3, 10, 12, 14, 16, 33-36, 38, 40 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by MILLER (US 4,682,276).

11. MILLER discloses a lamp housing apparatus (figs.1-5) comprising: a reflector (8) to reflect visible light and to pass radiation (col.1, lines 27-31) emitted from an inherent light source disposed within the reflector (8); and a heat dissipating housing (2) coupled to the reflector (8), the housing (2) having an inner surface (15), *contoured similarly to the reflector (8, as observed in fig.2)*, to absorb passed radiation and an outer surface having a plurality of formations (14-fig.2) so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface (14), wherein the reflector (8) and lamp are disposed or encased substantially completely within the housing (2-fig.2); wherein the absorbed radiation is infrared (IR) radiation (col.1, lines

27-31); wherein the plurality of formations (136A,136B) are fins (14) (figs.4-5) disposed longitudinally across the outer surface of the housing (2); wherein the housing (2) and the reflector (8) are formed as an integral unit (fig.2).

12. As for the phrases: "wherein the housing *substantially blocks* visible light that strays from the reflector" (claim 2); "wherein the inner surface of the housing is prepared to block the stray visible light" (claim 3); "wherein the outer surface of the housing blocks the stray visible light" (claim 10); "blocking the visible light that stays from the reflector with the housing" (claim 34); "wherein the blocking is performed by the inner surface of the housing" (claim 35); "wherein the blocking is performed by the outer surface of the housing" (claim 36); a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

13. Claims 1-3, 7, 10, 12, 13, 16, 33-35, 38, 39, 42 and '62 are rejected under 35 U.S.C. 102(b) as being anticipated by MENDLESKI (US 4,646,214).

14. MENDLESKI discloses a lamp housing and method of managing light and radiation comprising: a reflector (26) to reflect visible light and to pass radiation (col.5, lines 3-6) emitted from a light source (figs. 1-2) disposed within the reflector (26); and a

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heat dissipating housing (34,20,4) coupled to the reflector (26), the housing (34,20,4) having an inner surface (fig.2), *contoured similarly or configured to substantially correspond to the reflector (as observed in fig.2; col.3, lines 62-66)*, to absorb passed radiation and an outer surface (20) having a plurality of formations (24) so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface (24), wherein the reflector (26) is disposed or encased substantially completely within the housing (34,20,4); wherein the housing (34,20,4) *substantially blocks* visible light that strays from the reflector (by opaque material used: col.4, lines 63-68); wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by anodization (col.4, lines 63-68); wherein the inner surface (30 or 36) of the housing (32,20,4) is prepared to block the stray visible light (by being made of opaque materials and/or by stepped flare regions 30,32, col.4, lines 3-7); wherein the absorbed radiation is infrared (heat) radiation (col.5, line 5); wherein the plurality of formations (24) are fins (ribs 24) (figs.1-2) disposed latitudinally across the outer surface (20) of the housing (34,20,4); wherein the plurality of formations (24) are plates (ribs 24-fig.1) disposed in a parallel manner across the outer surface (20) of the housing (34,20,4); wherein the housing (34,20,4) and the reflector (26) are formed as an integral unit (fig.2); use as or with a projection lamp system (col.1, lines 5-19).

15. As best understood given the indefiniteness stated above, claims 43-48, 52, 55, 56 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by KAPILOW (US 3,492,069).

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16. KAPILOW discloses a projection lamp system comprising: a projector case (1,2 in figs.1 & 5) having a touchable surface; a lamp housing (19-22 in figs. 2-4, col.3, lines 34-45) disposed within the projector case (1,2), the lamp housing (19-22) having a reflector (29) and a light source (12) disposed within the reflector (30 in fig.7); and a heat dissipating housing (which is being referred also as the lamp housing 19-22) coupled to the reflector (29) having an inner surface and an outer surface having a plurality of formations (21 & 22 in fig.3), wherein the reflector (29 or 30) is disposed substantially completely within the heat dissipating housing (19-22 fig.3); wherein the inner surface of the heat dissipating housing (19-22) is prepared to enhance absorptivity of the passed radiation by applying a coating of an opaque material (col.3, lines 62-66); wherein the opaque material is paint (col. 5, lines 48-52) on inside and outside surfaces which inherently block radiation; wherein the plurality of formations are plates (21 & 22 in fig.3) disposed in a parallel manner (figs.2-3) or fins (21,22) disposed longitudinally (with respect to the lamp's (12) long dimension figs.2-3) across the outer surface of the housing (19-22); and wherein the housing (19-22) and the reflector (29) are formed as integral unit (fig.3).

17. As for the phrases: "to reflect visible light and passing a radiation emitted from a light source", "capable of absorbing the passed radiation", "so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface" in (claim 43); "wherein the housing is further capable of blocking the visible light that strays from the reflector" (claim 44); "wherein the inner surface of the housing is prepared to block the stray visible light" (claim 45); "wherein the inner surface of the heat dissipating

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housing is prepared to enhance absorptivity of the passed radiation" (claims 46 and 47); a recitation of function or intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Given the claimed structure, the structure in the prior art to KAPILOW is considered capable of performing the above functions or intended uses, which therefore meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

### ***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over MILLER (US 4,682,276) in view of RUDOLPH (US 3,586,851).

20. MILLER discloses the claimed invention as claimed except anodization of the inner surface of the housing as enhancement of heat absorptivity. RUDOLPH teaches a black anodized aluminum screen (192,268) which includes an entire inner surface or area about the lamp assembly made of the black anodized aluminum for the purpose of enhancing area-absorption of IR rays collecting the heat radiation so as to facilitate convection of the heat (col.5, lines 15-26). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to modify the enhanced inner



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surface of the heat removing housing of the lamp fixture of PUJOL to include a black anodized aluminum material as taught by RUDOLPH in order to enhance absorptivity or collection of IR or heat radiation by maximized inner surface area made of that anodized material adjacent or spaced from the lamp-reflector assembly.

21. Claims 13, 15, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over MILLER (US 4,682,276) in view of MENDLESKI (US 4,646,214).

22. MILLER discloses the claimed invention as claimed except the plurality of formations being plates disposed in a parallel manner across the outer surface of the housing and being rings disposed latitudinally across the outer surface of the housing.

23. MENDLESKI teaches a plurality of formations (24) that defined plates disposed in a parallel manner and latitudinally across the outer surface for dissipating heat from the interior or inner surface of the housing (20) towards outside the housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cooling fins of the light fixture housing of MILLER to include the type of parallel or latitudinal disposed plates across the outer surface of the housing as taught by MENDLESKI in order to dissipate heat from the lamp-reflector assembly.

24. Claims 5, 6, 43-49 and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over MENDLESKI (US 4,646,214) in view of KAPILOW (US 3,492,069).

25. MENDLESKI discloses substantially the claimed invention except: a coating of an opaque material of paint on the inner surface of the housing (claims 5, 6, 47 & 48); a

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projector case (claims 43 and 59); and the plurality of formations being fins disposed longitudinally across the outer surface of the housing (claim 56).

26. In regards to the paint coating, KAPILOW teaches applying a coating of an opaque material (col.3, lines 62-66); wherein the opaque material is paint (col. 5, lines 48-52) for the purpose of enhancing heat absorption and emitting capacity of the heat shield or housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to the lighting instrument of MENDLESKI including opaque paint material as taught by KAPILOW in order to enhance managing of heat from the lighting instrument.

27. In regards to the claimed projector case, MENDLESKI suggests that the lighting fixture is used for decorating effects and for creating special artistic effects such as image projection (col.1, lines 5-19). KAPILOW teaches an image projector that includes a housing-cover-base assembly (1,2) which define a case for protectively enclosing and positioning at least a projector lamp-reflector unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the light assembly of MENDLESKI to include it disposed in a projection case as taught by KAPILOW in order to produce desired decorating or artistic effects.

28. In regards to the longitudinally disposed fins across the outer surface of the housing, KAPILOW teaches a baffle plate (21, figs. 2 & 3) including fin-like baffles that are longitudinally disposed (with respect to the long side of either the lamp 12 or heat shield enclosure shown in figs.2 & 3) for the purpose of forming a enclosed heat shield (col.3, lines 34-73) which dissipates heat from the lamp. It would have been obvious to

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one having ordinary skill in the art at the time the invention was made to provide the heat dissipating ribs or fins of the lamp enclosure of MENDLESKI including longitudinal positioning of the ribs or fins as disclosed by KAPILOW in order to dissipate heat along the longitudinal length of the lamp.

### ***Allowable Subject Matter***

29. Claims 8, 9, 24 and 25 are allowed.

30. Claims 50 and 51 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

31. Claims 60, 61, 63 and 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

32. Applicant's arguments regarding amended claims 1 and 33 that include the phrase "contoured similarly to the reflector" and the argument regarding the "projector case" in claim 43 with respect to PUJOL have been fully considered and are persuasive. The rejection of at least claims 1, 33 and 43 have been withdrawn.

33. Applicant argues that independent claims 1, 33 and 43, and dependent claims thereof, Miller fails to disclose a reflector, much less a reflector to reflect visible light and to pass radiation. Examiner maintains that MILLER does disclose a reflector which reflects visible light and pass radiation since MILLER disclose halogen lamps having

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glass dichroic reflectors in which a portion of the light in the visible spectrum and most of the infrared is passed through the lamp reflector and into the fixture housing on column 1, lines 27-31, which clearly is directed to the invention disclosed and that the lamp or lamp reflector would clearly have to operate in that manner to dissipate heat to the light fixture immediately surrounding the lamp or lamp reflector.

34. Applicant argues that Miller fails to disclose a projector case or analogous structure within which a lamp housing is disposed, regarding claim 43. This argument has been considered and is persuasive. The rejection of claim 43 and associated depending claims as being anticipated by MILLER has been withdrawn.

35. Applicant argues that neither Miller nor Mendleski disclose, teach or suggest the modification of Miller with a plurality of parallel plates disposed latitudinally across the outer surface of a housing, and that Mendleski does not disclose a reflector that passes radiation. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, MENDLESKI does adequately teach or disclose parallel plates disposed latitudinally across the outer surface of the housing in generally similar contoured surrounding of a lamp-reflector

(26) that passes heat radiation (col.5, lines 3-6) for the purpose receiving heat and dissipating heat from the lamp or lamp-reflector.

36. The examiner has addressed the claimed projector case by making a new rejection of associated claims (at least claim 43) relying on the prior art to newly cited KAPILOW (US 3,492,069).


### ***Conclusion***

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. ANDREOLI (US 2,570,507) shows a projector device that includes a lamp (11), a reflector (17-fig.1) with curved shaping similar to enclosure or housing (4-fig.2) all of which are disposed in a projector case (1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (571) 272-2366. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan Cariaso  
Primary Examiner  
Art Unit 2875

AC  
May 31, 2004